



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,568	06/26/2001	William A. Sobonya	M 6817 MANCO	1960
7590	11/05/2003			EXAMINER RUDDOCK, ULA CORINNA
Stephen D. Harper Law Department 2500 Renaissance Blvd., Suite 200 Gulph Mills, PA 19406			ART UNIT 1771	PAPER NUMBER

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/891,568	SOBONYA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ula Ruddock	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 20 October 2003 .

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-15 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 5)  Notice of Informal Patent Application (PTO-152)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6)  Other: \_\_\_\_\_

1. Applicant's request for reconsideration filed October 20, 2003 has been entered and carefully considered. It is agreed that the prior art applied in the final rejection fails to meet the claimed limitation "embedded" within the scope clearly set forth by Applicant's disclosure. In spite of this advance, there exists a plethora of prior art that anticipates the generically claimed structure. There also exists several products on the market today that appears to duplicate not only the instantly claimed structure but the specific utility as well. Each of these teachings will be discussed herein below.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 10-12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Willard et al., US 3,385,751.

Applicant's claim 1 is directed to a generic composite sheet merely comprising a scrim embedded in a continuous foam.

Willard et al. is directed to tufted carpets and discloses therein a carpet backing construction that anticipates Applicant's composite sheet. Particularly, at column 3, lines 51-57, Willard et al. states the carpet includes a thin sheet of foam plastic, preferably of polyurethane and embedded midway between the upper broad surface and the lower surface is a reinforcing open-mesh screen. Figure 2 illustrates a woven mesh as the over and under

structure of weave is clearly shown. Figure 4 illustrates a non-woven material (see also column 4, lines 65-69). As to claim 5, after natural, synthetic and mineral fibers, nothing is left, so regardless of what the scrim of Willard et al. is made from it must be one if these three materials. However, Willard et al. do disclose the scrim to be made from polypropylene or nylon with preference given to nylon (column 4, lines 25-30). Claim 10 specifies a combination with a horizontal surface. This appears to be an attempt to claim the environment in which the composite is to be used. Since Willard et al. are drawn to carpets and carpets are installed on floors, the combination of the composite sheet thereof with a horizontal surface is clearly envisaged by the patent.

Claim 15 requires "spun strands". The scrim of Willard et al. is in the form of yarns. The production of yarns requires a spinning operation as does the formation of synthetic fibers that constitute those yarns. Given this understanding, it is believed that the yarns of the scrim of Willard et al. anticipate this "spun strand" feature of claim 15.

5. Claims 1, 3, 5, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Aine, US 4,078,293.

Aine represents another composite product quite different from that of Willard, yet anticipates the instant claims.

At column 7, lines 35-59, Aine sets forth a rigid foam pool cover comprising a reinforcing woven wire mesh embedded in a rigid foam. This is also illustrated best in Figures 13 and 17. As with Willard et al above, since natural, synthetic, and mineral, includes all fiber types, the wire mesh of Aine must be a member of one of the recited groups. Aine discusses

forming the foam against a plastic film layer. Such would cause the surface there against to be "smoothed".

6. Claims 1-3, 5-6, 9-11, 13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Krumweide, US 4,083,324.

Reinforced foam materials are also known in the insulation arts. For example, Krumweide discloses a low density foam of uniform thickness on a surface (horizontal shown, see abstract and Figures). Embedded in the foam is a woven reinforcing scrim made from polymeric, glass or metal fibers (column 3, lines 40-46). One surface of the foam may be smoothed (column 3, lines 4-7 and column 5, lines 60-67). Useful foams include urethanes and "vinyls" (column 2, lines 37-41). It should be noted that Hawley's Condensed Chemical Dictionary (14th Edition) has an entry for plastic foams that reads as follows:

**foam, plastic**

A cellular plastic that may be either flexible or rigid. Flexible foams may be polyurethane, rubber latex, polyethylene, or vinyl polymers; rigid foams are chiefly polystyrene, polyurethane, epoxy, and polyvinyl chloride. The blowing agents used are sodium bicarbonate, halocarbons such as CCl<sub>3</sub>F, and hydrazine. Flexible polystyrene foam is available in extruded sheets and also in the form of beads made by treating a polystyrene suspension with pentane; these expand from 30 to 50 times on heating and are used as automobile radiator sealants. Rigid foams are widely used for boat construction, filtration, fillers in packing cases, absorption of oil spills, and building insulation. The latter application involves a fire risk described below.

It appears clear that by the use of "vinyl" in the patent, polyvinyl chloride is being referred to. As nylon, a suitable material for the scrim, is made into fibers from a melt-spinning technique, the term "spun-strands" in claim 15 is deemed anticipated.

7. Claims 1-6, 9-13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Park et al., US 4,828,908.

Park et al. is directed to a vandal resistant seat (Title, Abstract). The composite material used as the seating comprises a foamed plastics material having embedded therein a metal or non-metal matrix (column 3, lines 5-12). The seating may include a layer of decorative material or may be textured (column 3, lines 20-23 and column 4, lines 10-20), addition of a sprayed on layer of polymer or lamination to a vinyl sheet is considered providing a smoothed surface. The polymers of the foam may be polyvinyl chloride or polyurethane, with polyurethane being particularly preferred (column 3, lines 24-36 and column 4, lines 21-22). The matrix embedded in the polymer may be either a woven or non-woven mesh of metal, synthetic material or natural fiber or wire (column 3, lines 44-46). The process to make the seating material may be continuous (column 3, lines 66-67). The material is designed for use in a seat either as the seating portion or the back portion (column 7, lines 3-8).

8. Claims 7-8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al.

The features of Park et al. have been set forth above. Park et al. disclose that the final product is compressed to a preferred thickness of 5 mm or less as the thickness of the included mesh and/or the foamed material dictates (column 6, lines 48-52). Clearly, the passage indicates that thinner is better and it only limited by the materials employed. It would have been obvious to one of ordinary skill to compress the materials of Park et al. to thicknesses within the range set forth instantly since such would improve vandal resistance by decreasing

the amount of material to be vandalized before the resistant layer is encountered but still be able to provide a decorative surface.

9. Claims 1-5, 7-8, 10-12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Bries et al., US 5,110,843.

Bries et al. is directed to skinless foams and composites therefrom (Abstract). From the examples, the composites can be employed as wipers. The structure of the composites include a thin layer of foam on both sides of an uncoated substrate (column 3, lines 49-51) including scrims or nets embedded in the foam (column 5, lines 65 to end). The foams discussed are polyurethanes (see entire disclosure). The substrates employed include woven and non-woven materials from natural or synthetic materials (column 6, lines 33-47). Determining the thickness of the produced materials is difficult given the reporting in the patent, but given that the procedure for determining the density is given at column 17, and that example 9 sets forth a substrate weight of 97 g/m<sup>2</sup> and a coating weight of 291 g/m<sup>2</sup>, based on the 10.16 x 10.16 sample size, the weight of the product works out to about 4g. Knowing the weight of the sample piece, it's planar dimension, and the density as reported in Table 2, one can calculate the thickness of the product as 0.21cm or 82.67 mils.

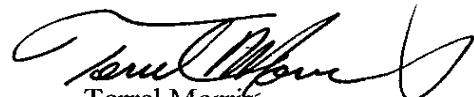
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

In addition to the prior art applied, US 4,533,588 to Kraft and US 5,295,883 to Moran are cited as disclosing scrim materials embedded in foam such as to read on at least claim 1.

While not necessarily *prior* art, the Examiner wishes to draw Applicant's attention to the Grip Print® Liner products of Cont-Tact Brand, a subsidiary of Pliant Solutions Corporation.

These products appear to be identical to what is being claimed instantly. As no date is associated with the attached Internet page nor is a specific disclosure of the structure provided, no rejections utilizing these products is set forth herein. The Examiner is attempting to obtain more information about these products. The URL to the site containing this information is:  
<http://www.contactbrand.com//catalog.asp?pls=14&bb=application&id=2>.

11. Any inquiry concerning this communication should be directed to Terrel Morris at telephone number 703-308-2414.



Terrel Morris  
Supervisory Patent Examiner  
Group Art Unit 1771